

Remarks/Arguments

Reconsideration of the above-identified application in view of the present amendment is respectfully requested. By the present amendment claims 11, 23, and 25 have been amended. New claim 32 has been added.

Preliminary Matters

The Applicant wishes to thank the Examiner for the courtesies extended during the telephone interview of January 9, 2009. During the interview, the Examiner suggested that the Applicant more clearly define that the fixation element makes direct contact with the chassis in order to frictionally engage the chassis and, thus, lock the fixation element relative to the chassis.

Claim Rejections under 35 U.S.C. §103

Claims 11, 13, 15-29, and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 1,789,060 to Weisenbach (hereafter "Weisenbach"). It is respectfully submitted that amended claim 11 is patentable over Weisenbach and is therefore allowable.

Amended claim 11 recites that one or more one-piece fixation elements are adapted to be received in a bone structure and in a polyethylene chassis. The polyethylene chassis has an elasticity giving a locking effect by friction on the fixation elements in such a way that the fixation elements are frictionally engaged by the polyethylene chassis and thereby locked by friction regarding movement in axial, rotational and angular directions.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981,

180 USPQ 580 (CCPA 1974). 35 U.S.C. §103 forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” In making a determination of obviousness under 35 U.S.C.

§103(a):

the scope and contents of the prior art are determined; the differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. Graham v. John Deere, 383 U.S. 1, 17-18, 86 S. Ct. 684, 15 L. Ed. 2d 545 (1966).

Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. KSR Int’l Co. v. Teleflex Inc., 127 S. Ct. 1727; 2007 U.S. Lexis 4745, 36-37; 75 U.S.L.W. 4289; 82 U.S.P.Q.2d 1385 (2007). Also, the U.S. Supreme Court in KSR Int’l. Co. V. Teleflex, Inc. noted that the analysis supporting a rejection under 35 U.S.C. 103(a) should be made explicit, and that it was “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed.” KSR at 1741.

Weisenbach does not teach one-piece fixation elements received in both bone and in a chassis such that the fixation elements are frictionally engaged by the

chassis and thereby locked. Weisenbach teaches anchor screws 8 that extend through clamp members 12, 15 and are screwed into holes 7 in bone (Fig. 1). The clamp members 12, 15 are rigidly secured over the screws 8 by means of and between nuts 26 which thread on the anchor screws 8 (lines 88-94 and Fig. 1). That is, the screws 8 are fixed relative to the clamp members 12, 15 by the nuts 26 providing a clamping force to the top and bottom of each clamp member 12, 15 while being threaded to each screw 8. The screws 8 are not locked relative to the clamp members 12, 15 because the clamp members 12, 15 impart friction on the screws 8.

In fact, there appears to be no actual contact between the screws 8 and the clamping members 12, 15. Accordingly, there can be no friction imparted by the clamp members 12, 15 to the screws 8. Since the screws 8 are secured to the bone and the nuts 26 clamp upon the clamp members 12, 15, Weisenbach does not teach one-piece fixation elements received in both bone and in a chassis such that the fixation elements are frictionally engaged by the chassis and thereby locked. Accordingly, it is respectfully submitted that amended claim 11 is patentable over Weisenbach and is therefore allowable.

Claims 13, 15-22, and 31 depend from claim 11 and are allowable for at least the same reasons as claim 11 and for the specific limitations recited therein.

Amended claim 23 recites a one-piece fixation element that connects with, and extends through, a chassis, the fixation element frictionally engaging the chassis to prevent axial, rotational and angular movement of the fixation element relative to the chassis. Weisenbach does not teach or suggest this structure.

Weisenbach teaches that clamp members 12, 15 are anchored with respect to a bone via anchor screws 8 screwed into holes 7 in the base (lines 59-64 and Fig. 1). Slots 13 and 16 of the clamp members 12, 15 are adapted to slide over the anchor screws 8. The clamp members 12, 15 are rigidly secured over the screws 8 by means of and between nuts 26 which thread on the anchor screws 8 (lines 88-94 and Fig. 1). Thus, the screws 8 extend through the clamp members 12, 15 while the nuts 26 engage the clamp members 12, 15 to secure the screws 8 relative to the clamp members 12, 15. The screws 8 do not contact or engage the clamp members 12, 15 in any way. Therefore, Weisenbach does not teach a one-piece fixation element that connects with, and extends through, a chassis, the fixation element frictionally engaging the chassis to prevent axial, rotational and angular movement of the fixation element relative to the chassis.

Furthermore, it would not have been obvious to one having ordinary skill in the art to modify the device of Weisenbach to teach the subject matter of amended claim 23 because such a modification would produce undesirable results. In particular, if the screws 8 and the nuts 26 were manufactured as a one-piece unit, it would be impossible to fasten the screws 8 relative to either of the clamp members 12, 15. The device of Weisenbach relies on the releasable connection between the screws 8 and the nuts 26 to secure the clamp members 12, 15 to the screws and properly position the clamp members relative to the screws. By manufacturing the screws 8 and nuts 26 as a single unit, the clamp members 12, 15 could not be slid over the screws 8, nor could the nuts 26 be tightened to provide the clamping force necessary to secure the clamp members 12, 15 relative to the screws 8.

Additionally, Weisenbach teaches that once the screws 8 are fixed within the bone 4, 5, the slots 13, 16 allow the clamp members 12, 15 to be vertically and horizontally located before tightening the nuts 26 to secure the clamp members to the screws. Therefore, the practitioner can set the screws 8 at desired locations and then use the tolerance provided by the slots to position the clamp members 12, 15 along the screws 8. If the screws 8 were modified to frictionally engage the clamp members 12, 15, there would be no ability to horizontally locate the clamp members. Since one having ordinary skill would consider positioning of the clamp members 12, 15 critical to proper bone healing, the loss of horizontal positioning would be undesirable. Accordingly, it would not have been obvious to one skilled in the art to modify Weisenbach to teach the subject matter of amended claim 23. For these reasons, it is respectfully submitted that amended claim 23 is patentable over Weisenbach and is therefore allowable.

Claims 24-29 depend from claim 23 and are allowable for at least the same reasons as claim 23 and for the specific limitations recited therein.

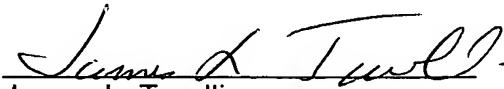
New Claims

Claim 32 recites one-piece fixation elements received in both bone and in a chassis such that the fixation elements are frictionally engaged by the chassis and thereby locked. As noted, it is believed that Weisenbach does not teach or suggest this structure. Accordingly, it is respectfully submitted that claim 32 is patentable over Weisenbach and is therefore allowable.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,


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